UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,139	01/28/2004	Katsuhiko Yamazaki	248184US0	9716

22850 7590 07/26/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
KOSLOW, CAROL M	

ART UNIT	PAPER NUMBER
1755	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/765,139	YAMAZAKI ET AL.	
	Examiner	Art Unit	
	C. Melissa Koslow	1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) *7* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/28/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Applicant's election without traverse of Group I, claims 1-6 in the response dated 2 June 2005 is acknowledged.

Claim 7 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

The reference cited in the information disclosure statement of 28 April 2004 has been considered with respect to the provided English abstracts.

The lists of copending applications cited in the information disclosure statements filed 28 April 2004 and 19 October 2005 fail to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office. It has been placed in the application file, but the information referred to therein has not been considered.

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It does not identify the city and state or foreign country of residence of each inventor.

Neither the oath of the application data sheet lists the residence of each inventor. These documents give the inventors residences as "c/o TDK Corporation" and then list the mailing address for TDK Corporation. "c/o" is used to direct a persons mail to a location that is not that persons residence.

The disclosure is objected to because of the following informalities: The sentence ending in line 19 on page 19 has ",." at its end. Appropriate correction is required.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim is unclear as to its meaning. The wording of the claim implies that the paint concentration is within 5-20% of the concentration of solids, where the concentration of the solids is not defined. The specification teaches the paint concentration is in the range of 5-20% in terms the solids concentration in the paint. It appears the claim wording is due to a mistranslation and it is suggested to reword the claim so that its meaning is clear.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> **A person shall be entitled to a patent unless –**
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 2001-81406.

This reference teaches manufacturing magnetic paint that is used to form the magnetic layer for magnetic recording media comprising the step of dispersing a mixed solution comprising at least one binder, a solvent and ferromagnetic metal particles having an average major-axis length or particle size of 100 nm using a dispersion device comprising a dispersion

media having an average particle size of 1 mm or less. The examples teach the dispersion media has an average particle size of 1 mm, 0.8 mm, 0.6 mm and 0.3 mm. The reference clearly teaches the claimed process.

Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 2000-339678.

This reference teaches manufacturing magnetic paint that is used to form the magnetic layer for magnetic recording media comprising the steps of dispersing and diluting the mixed solution in a churning device and then dispersing a mixed solution comprising at least one binder, a solvent and ferromagnetic metal particles having an average major-axis length or particle size of 200 nm or less using a sand mill comprising a dispersion media having an average particle size of 0.5-1.2 mm. The examples teach the magnetic particles have an average size of 100 nm and the dispersion media has an average particle size of 0.7 mm or 0.5 mm. The reference clearly teaches the claimed process.

Claims 1-5 are provisionally rejected under 35 U.S.C. 102(e) as being anticipated by copending Application No. 10/446,847 which has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e), if patented. This provisional rejection under 35 U.S.C. 102(e) is based upon a presumption of future patenting of the copending application.

This rejection may not be overcome by the filing of a terminal disclaimer. See *In re Bartfeld*, 925 F.2d 1450, 17 USPQ2d 1885 (Fed. Cir. 1991).

Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent application publication 2004/13795.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e).

The above rejections under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Application 10/446,847 was published as U.S. patent application publication 2004/13795.

These references teach manufacturing magnetic paint that is used to form the magnetic layer for magnetic recording media comprising the steps of predispersing the mixed solution in a device and then dispersing a mixed solution comprising at least one binder, a solvent and acicular ferromagnetic metal particles having an average major-axis length or particle size of 50-100 nm using a sand mill comprising a dispersion media having an average particle size of 0.05-0.3 mm. The reference clearly teaches the claimed process.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-339,678.

As stated above, this reference teaches the claimed process. The taught average particle size of the magnetic particles or 200 nm or less and the claimed average size of the dispersion media of 0.5-1.2 both overlap the claimed size ranges of claims 2 and 5. Product claims with numerical ranges which overlap prior art ranges were held to have been obvious under 35 USC 103. *In re Wertheim* 191 USPQ 90 (CCPA 1976); *In re Malagari* 182 USPQ 549 (CCPA 1974); *In re Fields* 134 USPQ 242 (CCPA 1962); *In re Nehrenberg* 126 USPQ 383 (CCPA 1960). The reference suggests the claimed process.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-339678 or JP 2001-81406, each in view of U.S. patents 3,836,395; 4,568,612; 5,169,721 and 6,548,160.

As discussed above, JP 2000-339678 and JP 2001-81406 both teach the claimed process. Neither reference teaches the shape of the ferromagnetic metal powder. U.S. patents 3,836,395; 4,568,612; 5,169,721 and 6,548,160 all teach the preferred shape of ferromagnetic metal powders used in the magnetic layer for magnetic recording media is acicular. One of ordinary skill in the art would have found it obvious to use this preferred shape for the particles in JP 2000-339678 and JP 2001-81406.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 and 5 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/446,847 in view of JP 2000-339678 and U.S. patents 4,568,612; 5,169,721 and 6,548,160.

This is a provisional obviousness-type double patenting rejection.

Claim 1 of copending Application No. 10/446,847 teaches the step of dispersing a mixed solution comprising at least one binder, a solvent and magnetic particles in a dispersing device comprising dispersing media having an average particle size of 0.5 mm or less. The claim does not teach the average particle size of the magnetic particles. JP 2000-339678 and U.S. patent 6,548,160 both show that the conventional magnetic particles used in the magnetic layer for magnetic recording media are preferably ferromagnetic metal acicular particles having an average major-axis length of 200 nm or less. Thus, one of ordinary skill in the art would have found it obvious to use these preferred conventional particles as the magnetic particles used in the claimed magnetic paint. The resulting process suggests the process claimed in this application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk
July 22, 2005

C. Melissa Koslow
Primary Examiner
Tech. Center 1700